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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,978	02/09/2004	Tilmann Lorenz	2001P18006WOUS	9576

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BSH HOME APPLIANCES CORPORATION  
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EXAMINER
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PERRIN, JOSEPH L

ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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01/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/774,978

Applicant(s)

LORENZ ET AL.

Examiner

Joseph L. Perrin, Ph.D.

Art Unit

1792

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-33 and 37-40 is/are pending in the application.
- 4a) Of the above claim(s) 22-25 and 30-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 19-21, 26-29 and 37-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Response to Arguments*

1. In view of applicant's amendment, the §102(b) rejection of claims 19-20 & 29 over BUGNACKI is withdrawn.
2. Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Specifically, applicant simply lists claimed limitations and generally states that the prior art does not teach or suggest these limitations without pointing out how the claimed washing machine patentably distinguishes from the prior art of record. Since all of the claimed structural limitations are taught or reasonably suggested by the prior art of record, no *patentably* distinguishing limitations are apparent. It is noted that applicant is wholly silent with respect to newly added claims 37-40 as to how they patentably distinguish over the prior art of record.
3. Applicant's arguments filed 29 October 2007 have been fully considered but they are not persuasive.
4. As discussed above, the §102(b) rejection is rendered moot by the instant amendment.
5. Regarding the §103 rejections over SMITH in view of BUGNACKI, and SMITH in view of BUGNACKI/YOUN, applicant argues that "Smith would not cure the deficiencies of BUGNACKI" and "Youn also would not cure the deficiencies of Bugnacki". This is not

persuasive because BUGNACKI is the secondary reference and not relied upon for anything but the specific teaching of a temperature profile measuring sensor used to measure inertia, tilt and vibration in a washing machine. Thus, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Moreover, it is fundamental that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In the instant case, SMITH is cited for teaching a washing machine with sensor directly connected to the motor which is directly connected to the wash tub. The sensor is coupled to the tub via a lever (see the details of the sensor shown in Figure 2 of SMITH). Hence, such connection reads on the sensor being "coupled" to the tub provides the same predictable results of the claimed invention of sensing vibration/tilt of the tub. Even if, *arguendo*, one were to construe the sensor of SMITH as somehow requiring a direct coupling to the tub (which is not claimed) the position is taken that such reconfiguration would be well within the level and skill of one having ordinary skill in the art by simply moving the sensor and would result in the exact same predictable result of sensing vibration/tilt of the wash tub. It has been held that

rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70. Moreover, whether the sensor is directly coupled to the tub or coupled to another structure (i.e. a motor) which is directly coupled to the tub, both configurations would provide the same predictable results and therefore do not serve to patentably distinguish. Notwithstanding this, it is important to realize that the claimed invention is broad in scope and the "coupled to" language reads on both types of coupling, direct and indirect.

6. Thus, as each of the structural limitations claimed are known in the prior art, and the substitution of one known vibration/tilt sensor for the other would result in the same predictable result of sensing vibration/tilt in a washing machine tub, the claimed invention is deemed an obvious modification of the prior art of record.

### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claim 40 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: adequate lever structure which is capable of converting rotational movement of the linen treatment device to translational movement of the sensor. Without such structure, there is a gap between the elements on how the claimed apparatus is capable of performing such conversion via a lever. Clarification and correction are required.

***Claim Rejections - 35 USC § 103***

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claim 19-21, 29 & 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over SMITH in view of BUGNACKI.

SMITH discloses a washing machine with a lever device and sensor (32) coupled to a washing machine tub (12) for sensing load imbalance (see Figures 1-2 and relative associated text). Re newly added claim 40, the "wherein" clause is directed to intended use and fails to provide any adequate structure to further define the claimed washing machine, for instance, in the combination of such use language with structure of the lever device. Manifestly, the tub of SMITH provides rotational movement and the sensor with lever (46) provides sensing along translational axis (30) and therefore is fully capable of performing the intended use of claim 40. However, SMITH does not disclose the sensor as being a temperature profile measuring sensor. BUGNACKI teaches that is known to provide a washing machine with a temperature profile measuring sensor in order to provide an inexpensive, high-reliable sensor and to avoid stiction problems associated with mechanical sensors (see page 9).

Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted the mechanical sensor of SMITH with the temperature profile sensor of BUGNACKI in order to achieve the aforementioned known advantages associated therewith. Moreover, there would have been a reasonable expectation of success in providing one washing

machine imbalance sensor for another since both references are analogous art and the imbalance sensors are functional equivalents.

Regarding newly added claims 37-39, SMITH discloses plural levers pivotable around a fulcrum (see levers connected to springs (64/84) and the levers connected to the sensor, the washing machine tub and the pivot connection of the levers readable on a hinge joint (provides same function of pivoting), which are connected to structure readable on a rail (44). Thus, the structure of claims 37-38 read on the sensor and lever device (32) of SMITH as claimed. Re claim 39, the levers are shown to be parallel to the rotational axis of the tub in SMITH (see Figures 1-2, which clearly illustrate such configuration).

11. Claims 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over YOUN in view of BUGNACKI and SMITH.

YOUN discloses a washing machine (100) with load sensor for sensing multiple parameters including imbalance and load size, a controller (130) for calculating the imbalance and load size, and a display device (140) for displaying the operating state of the washing machine with sense signal generation means for generating a fault sense signal indicative of a machine fault (see entire document, for instance, Figure 2 and relative associated text and paragraph [0014]).

The combination of SMITH and BUGNACKI (see previous rejection) teach that it is known to provide a washing machine with a temperature profile measuring sensor as the imbalance detecting sensor in order to provide an inexpensive, high-reliable sensor

and to avoid stiction problems associated with mechanical sensors. Therefore, the position is taken that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have provided the washing machine of YOUN with the temperature profile sensing means of SMITH and BUGNACKI in order to achieve the aforementioned known advantages associated therewith. Moreover, there would have been a reasonable expectation of success in providing one washing machine imbalance sensor for another since the references are analogous art and the imbalance sensors are functional equivalents.

### ***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

13. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.



14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Perrin, Ph.D. whose telephone number is (571)272-1305. The examiner can normally be reached on M-F 8:00-4:30.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael E. Barr can be reached on (571)272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Perrin/  
Joseph L. Perrin, Ph.D.  
Primary Examiner  
Art Unit 1792

JLP